IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claim 29 in accordance with the following:

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1. (ORIGINAL) A CD-type disc comprising:

a lead-in area;

a lead-out area; and

a user area, wherein

said lead-in area, said lead-out area and said user area all have a compact disc read only memory (CD-ROM) format and are distinguished from each other on a physical layer of the disc, and

information having a digital versatile disc (DVD) application format according to a predetermined file system is recorded in said user area.

2. (ORIGINAL) The disc of claim 1, wherein the predetermined file system is a universal disc format (UDF).

3. (ORIGINAL) The disc of claim 1, wherein the predetermined file system is a universal disc format (UDF) bridge format.

4. (ORIGINAL) An apparatus to record/reproduce data on/from a physical layer of a CD-type disc which is divided into a lead-in area, a lead-out area and a user area, each having a CD-ROM format, comprising:

a DVD application audio/video (A/V) encoder to encode a received A/V signal into a DVD format to provide an A/V stream;

a first formatter to format the A/V stream according to a predetermined file system for a DVD application; and

a second formatter to write data formatted according to the predetermined file system to the user area, to format data for the lead-in area and the lead-out area in the CD-ROM format and to write the CD-ROM formatted data to the lead-in area and the lead-out area.

5. (ORIGINAL) The apparatus of claim 4, wherein the predetermined file system is a universal disc format (UDF).

6. (ORIGINAL) The apparatus of claim 4, wherein the predetermined file system is a universal disc format (UDF) bridge format.

7. (ORIGINAL) The apparatus of claim 4, further comprising:

a differentiator to determine whether the disc is a CD and if it is determined that the disc is a CD, to determine whether the CD is a video CD or an audio CD;

an analyzer to analyze whether the predetermined file system exists if it is determined by said differentiator that the disc is neither a video CD nor an audio CD;

a first deformatter to deformat the DVD application which has been written to the user area when the predetermined file system exists, to provide first deformatted data; and

a first decoder to decode the first deformatted data to restore the A/V signal.

8. (ORIGINAL) The apparatus of claim 7, further comprising:

a second deformatter to deformat a CD application which has been read from the disc if it is determined by said differentiator that the disc is a video CD or an audio CD, to provide second deformatted data; and

a second decoder to decode the second deformatted data to restore the A/V signal.

9. (ORIGINAL) The apparatus of claim 4, further comprising:

a first differentiator to determine whether the disc is a DVD or a CD by checking the physical structure of the disc;

a second differentiator to determine whether the disc is a video CD or an audio CD if it is determined by said first differentiator that the disc is a CD;

an analyzer to analyze whether the predetermined file system exists if it is determined by said second differentiator that the disc is neither a video CD nor an audio CD or if it is determined by said first differentiator that the disc is a DVD;

a first deformatter to deformat the DVD application which has been read from the disc if the predetermined file system exists, to provide first deformatted data;

a first decoder to decode the first deformatted data to restore the A/V signal;

a second deformatter to deformat a CD application which has been read from the disc if it is determined by said second differentiator that the disc is a video CD or an audio CD, to provide second deformatted data; and

a second decoder to decode the second deformatted data to restore the A/V signal.

10. (ORIGINAL) A method of recording/reproducing data on/from a physical layer of a CD-type disc which is divided into a lead-in area, a lead-out area and a user area, each having a CD-ROM format, comprising:

(a) encoding received audio and/or video (A/V) signals into a DVD format to provide an A/V stream;

(b) formatting the A/V stream according to a predetermined file system for a DVD application; and

(c) writing the A/V stream formatted according to the predetermined file system to the user area, formatting data for the lead-in area and the lead-out area in the CD-ROM format, and writing the CD-ROM formatted data to the lead-in area and the lead-out area.

11. (ORIGINAL) The method of claim 10, wherein the predetermined file system is a universal disc format (UDF).

12. (ORIGINAL) The method of claim 10, wherein the predetermined file system is a universal disc format (UDF) bridge format.

13. (ORIGINAL) The method of claim 10, further comprising:

(d) determining whether the disc is a CD and if it is determined that the disc is a CD, determining whether the CD is a video CD or an audio CD;

(e) determining whether the predetermined file system exists if it is determined in said step (d) that the CD is neither a video CD nor an audio CD;

(f) deformatting the DVD application written to the user area when the predetermined file system exists, to provide first deformatted data; and

(g) decoding the first deformatted data to restore the A/V signals.

14. (ORIGINAL) The method of claim 13, further comprising:

(h) deformatting a CD application which has been read from the disc if it is determined in said step (d) that the disc is a video CD or an audio CD, to provide second deformatted data; and

(i) decoding the second deformatted data to restore the A/V signals

15. (ORIGINAL) The method of claim 10, further comprising:

(d) determining whether the disc is an audio CD by analyzing control information in a sub-Q area of the lead-in area of the disc;

(e) playing an audio CD if it is determined in said step (d) that the disc is an audio CD, and, if it is determined in said step (d) that the disc is not an audio CD, determining whether the disc is a video CD by analyzing top of contents (TOC) information;

(f) analyzing video CD information on a first track of the disc and playing a video CD according to the analyzed video CD information if it is determined in said step (e) that the disc is a video CD and, if it is determined in step (d) that the disc is not a video CD, analyzing the predetermined file system; and

(g) reproducing DVD data if it is determined in said step (f) that the DVD application exists.

16. (ORIGINAL) The method of claim 10, further comprising:

(d) discriminating whether the disc is a DVD or a CD by checking the physical structure of the disc;

(e) determining the CD type if it is determined in said step (d) that the physical structure of the disc corresponds to that of a CD;

(f) determining whether the predetermined file system exists if it is determined in said step (d) that the physical structure of the disc corresponds to that of a DVD or if it is determined in said step (e) that the CD is neither a video CD nor an audio CD;

(g) deformatting the DVD application read from the disc when the predetermined file system exists, to provide first deformatted data; and

(h) decoding the first deformatted data to restore the A/V signals.

17. (ORIGINAL) The method of claim 16, further comprising:

(i) deformatting a CD application which has been read from the disc if it is determined in said step (e) that the CD is a video CD or an audio CD, to provide second deformatted data; and

(j) decoding the second deformatted data to restore the A/V signals.

18. (ORIGINAL) The method of claim 10, further comprising:

(d) determining whether the disc is a DVD or CD by analyzing the physical structure of the disc;

(e) determining whether the disc is an audio CD by analyzing control information in a sub-Q area of the lead-in area of the disc if it is determined in said step (d) that the physical structure of the disc corresponds to that of a CD;

(f) playing an audio CD if it is determined in said step (e) that the disc is an audio CD, and, if it is determined in said step (e) that the disc is not an audio CD, determining whether the disc is a video CD by analyzing TOC information;

(g) analyzing video CD information on a first track of the disc and playing a video CD according to the analyzed video CD information if it is determined in said step (f) that the disc is a video CD and, if it is determined in said step (f) that the disc is not a video CD, analyzing the predetermined file system; and

(h) reproducing DVD data if it is determined in said step (g) that the DVD application exists.

19. (ORIGINAL) The method of claim 18, further comprising:

(i) analyzing the predetermined file system if it is determined in said step (d) that the physical structure of the disc corresponds to that of a DVD; and

(j) reproducing DVD data if it is determined in said step (i) that the DVD application exists.

20. (ORIGINAL) A method of recording on a disc physically divided into a lead-in area, a lead-out area and a user area, comprising:

formatting the lead-in area, the lead-out area and the user area according to a compact disc read only memory format; and

recording information in a digital versatile disc application format in the user area.

21. (ORIGINAL) A CD-type disc recording apparatus, the disc being formatted according to a CD-ROM type format and being divided into a lead-in area, a lead-out area and a user area, comprising:

an encoder to encode a signal into a DVD-type format to provide an A/V stream;

a formatter to format the A/V stream according to a DVD-type application of the DVD-type format and to write the A/V stream formatted according to the DVD-type application to the user area.

22. (ORIGINAL) An apparatus to reproduce information from a physical layer of a CD-type disc having a lead-in area, a lead-out area and a user area, each having a CD-ROM-type format, comprising:

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a differentiator to determine whether the disc is a CD and if it is determined that the disc is a CD, to determine whether the CD is a video CD or an audio CD;

an analyzer to analyze whether a predetermined file system exists on the disc if it is determined by said differentiator that the disc is neither a video CD nor an audio CD;

a first deformatter to deformat a DVD application which has been written to the user area when the predetermined file system exists on the disc, to provide first deformatted data; and

a first decoder to decode the first deformatted data to restore an original audio/video signal from the disc.

23. (ORIGINAL) The apparatus of claim 22, further comprising:

a second deformatter to deformat a CD application which has been read from the disc if it is determined by said differentiator that the disc is a video CD or an audio CD, to provide second deformatted data; and

a second decoder to decode the second deformatted data to restore the original A/V signal.

24. (ORIGINAL) An apparatus to reproduce information from a physical layer of a CD-type disc having a lead-in area, a lead-out area and a user area, each having a CD-ROM-type format, comprising:

a first differentiator to determine whether the disc is a DVD or a CD by checking the physical structure of the disc;

a second differentiator to determine whether the disc is a video CD or an audio CD if it is determined by said first differentiator that the disc is a CD;

an analyzer to analyze whether a predetermined file system exists on the disc if it is determined by said second differentiator that the disc is neither a video CD nor an audio CD or if it is determined by said first differentiator that the disc is a DVD;

a first deformatter to deformat a DVD application which has been read from the disc if the predetermined file system exists, to provide first deformatted data;

a first decoder to decode the first deformatted data to restore an original A/V signal from the disc;

a second deformatter to deformat a CD application which has been read from the disc if it is determined by said second differentiator that the disc is a video CD or an audio CD, to provide second deformatted data; and

a second decoder to decode the second deformatted data to restore original A/V signal from the disc.

25. (ORIGINAL) A method of reproducing data from a physical layer of a CD-type disc which is divided into a lead-in area, a lead-out area and a user area, each having a CD-ROM format, comprising:

(a) determining whether the disc is a CD and if it is determined that the disc is a CD, determining whether the CD is a video CD or an audio CD;

(b) determining whether a predetermined file system exists on the disc if it is determined in said step (a) that the CD is neither a video CD nor an audio CD;

(c) deformatting a DVD application written to the user area when the predetermined file system exists, to provide first deformatted data; and

(d) decoding the first deformatted data to restore original A/V signals from the disc.

26. (ORIGINAL) The method according to claim 25, further comprising:

(e) deformatting a CD application which has been read from the disc if it is determined in said step (a) that the disc is a video CD or an audio CD, to provide second deformatted data; and

(f) decoding the second deformatted data to restore the original A/V signals.

27. (ORIGINAL) A method of reproducing data from a physical layer of a CD-type disc which is divided into a lead-in area, a lead-out area and a user area, each having a CD-ROM format, comprising:

(a) determining whether the disc is an audio CD by analyzing control information in a sub-Q area of the lead-in area of the disc;

(b) playing an audio CD if it is determined in said step (a) that the disc is an audio CD, and, if it is determined in said step (a) that the disc is not an audio CD, determining whether the disc is a video CD by analyzing top of contents (TOC) information;

(c) analyzing video CD information on a first track of the disc and playing a video CD according to the analyzed video CD information if it is determined in said step (b) that the disc is a video CD and, if it is determined in step (a) that the disc is not a video CD, analyzing a predetermined file system on the disc; and

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(d) reproducing DVD data if it is determined in said step (c) that the predetermined file system exists.

28. (ORIGINAL) A CD-type disc recording apparatus, the disc being formatted according to a CD-ROM type format and being divided into a lead-in and/or a lead-out area and a user area, comprising:

an encoder to encode a signal into a DVD-type format to provide an A/V stream; and

a formatter to format the A/V stream according to a DVD-type application of the DVD-type format and to write the A/V stream formatted according to the DVD-type application to the user area.

29. (CURRENTLY AMENDED) A method of reproducing data from a physical layer of a CD-type disc which is divided into a lead-in area, a lead-out area and a user area, each having a CD-ROM format, comprising:

(a) determining whether the disc has a first format and if it is determined that the disc has the first format, determining whether the disc is a type A disc or a type B disc;

(b) determining whether a predetermined file system exists on the disc if it is determined in said step (a) that the disc is neither a type A disc nor a type B disc;

(c) deformatting an application of a second format written to the user area when the predetermined file system exists, to provide first deformatted data; and

(d) decoding the first deformatted data to restore original A/V signals from the disc.

30. (ORIGINAL) An optical disc comprising:

a lead-in and/or lead-out area; and

a user area, wherein

said lead-in and/or lead-out area and said user area all have a first format type and are distinguished from each other on a physical layer of the optical disc, and

information having a second format type according to a predetermined file system is recorded in said user area.

31. (ORIGINAL) A CD-type disc comprising:

a lead-in and/or lead-out area; and

a user area, wherein

said lead-in and/or lead-out area and said user area all have a compact disc read only memory (CD-ROM) format and are distinguished from each other on a physical layer of the disc, and

information having a digital versatile disc (DVD) application format according to a predetermined file system is recorded in said user area.

32. (ORIGINAL) An apparatus to record data on a physical layer of an optical disc which is divided into a lead-in area, a lead-out area and a user area, each having a first format type, comprising:

an application audio/video (A/V) encoder to encode a received A/V signal into a second format type to provide an A/V stream;

a first formatter to format the A/V stream according to a predetermined file system for an application of the second format type; and

a second formatter to write data formatted according to the predetermined file system to the user area, to format data for the lead-in area and the lead-out area in the first format type and to write the first format type formatted data to the lead-in area and the lead-out area.

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